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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,794	06/14/2002	Axel Kalleder	24448-0032	9531

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EXAMINER
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ZIMMER, MARC S

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/088,794

Applicant(s)

KALLEDER ET AL.

Examiner

Marc S. Zimmer

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1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☒ Claim(s) 11-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### ***Claim Objections***

Claims 11-20 are objected to for their recitation of a material that is not completely delineated. In particular, the term "coloring" in each of claims 11 and 16 should probably be replaced with the term "colorant".

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11-20 are rejected under 35 U.S.C. 112, first paragraph, because the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to prepare/practice the invention commensurate in scope with these claims. According to independent claims 11 and 15, *catalytically-active* fillers are among the materials that may be incorporated into the polyorganosiloxane host matrix. The italicized phrase would seem to indicate that the fillers are those that are capable of facilitating a synthetic conversion but it cannot be ascertained precisely what reactions that said fillers will promote. Hence, the full scope of these claims is unclear. Clarification is required.

### ***Claim Analysis***

Applicants claim a composition, and a method for preparing the same, that is comprised in its most fundamental embodiment simply of a organosilicon condensate, one of several types of filler materials, a diluent meeting specified a boiling temperature limitation, and a rheological control agent (otherwise known variously as a rheology

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modifier, a viscosity- or flow control agent, and a thixotropic agent). The disclosure names only fish oils, celluloses, cellulose derivatives and polyalcohols as representative of said agent. However, one having ordinary skill in the art will appreciate that materials as ubiquitous as fumed silica and organic solvents will also influence the rheological properties of a polymer composition. In fact, it could be argued that some of the fillers (b) could function as a rheology control agent. Therefore, any reference teaching an organosilicon condensate, one of the fillers (b), a solvent and/or silica have been added would anticipate the instant invention

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

**(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.**

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 16-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Terry et al., U.S. Patent # 6,538,092. Terry et al. disclose a coating composition that simultaneously exhibits good abrasion resistance and a high refractive index thereby making it useful for coating plastic optical lenses. In its most fundamental embodiment, the composition is said to comprise an aqueous-organic solvent mixture containing (i) partial condensates of an epoxy-functional silane, (ii) a carboxylic acid compound, (iii) a

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metal oxide composite colloid, (iv) colloidal silica, and (v) an orthosilicate. Exemplary of the organic solvents are the compounds mentioned in column 5, lines 43-65 including a number of mono- and dialkylated (di)ethylene glycol derivates, many of which inherently possess a boiling point of above 150° C. Titania (titanium oxide), zirconia, tin oxide, and iron oxide are delineated as satisfactory inorganic oxides for fulfilling the role of component (iii). Notably, Applicant has admitted on page 9, lines 608 of the Specification that these materials are exemplary of the catalytically active fillers. Therefore, claim 16 is anticipated by the reference where the composition calls for a catalytically active filler. As for component (d) of the instant invention, one of ordinary skill will appreciate that colloidal silica is a well-documented thixotropic, or rheology control, agent.

As for claim 17, the general disclosure (column 4, lines 51-56) only recites the quantity of the epoxy-functional silane relative to the mole sum of components (iii), (iv), and (v). Nevertheless, in a number of the specific Examples including Examples 1 and 2, the molar percentage of the epoxy-functional silane as a fraction of the total amount of silane compounds is well above the lower threshold stipulated by the claim (ca. 75 mol% in Examples 1 and 2).

Claims 16-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ichikawa et al., JP 62-230873 A and/or its abstract. According to the abstract of this document, a composition is disclosed comprising a hydrolyzate (condensate) of organotrialkoxysilane, a lower alcohol, a solvent having a boiling point of between 120° and 320° C, fibrous potassium titanate, a pigment, and an ultrafine metallic oxide

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particulate. Exemplary of the metal oxide particulate are titanium oxide and colloidal alumina (page 671, lower left quadrant) which, again, Applicant has admitted are exemplary of the catalytically active fillers. In view of Ichikawa's mention of the inorganic fillers and solvents, Applicant's requirement for a rheology control agent is also satisfied as these materials are also known to influence the thixotropy of a polymer composition. Applicant's invention is thus anticipated where (b) corresponds to either a colorant or a catalytically-active filler.

***Allowable Subject Matter***

Claims 11-15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, first paragraph, set forth in this Office action. The coating disclosed by Terry is not applied to the substrate in an imagewise fashion, wherein imagewise is defined on page 4 of Applicant's Specification, nor would one of ordinary skill be motivated to modify Terry's invention in manner necessary to arrive at the instant invention in view of the intended use of their composition. Furthermore, while there is precedent for the densification of a synthetic resin-based coating at a temperature that is under the glass transition temperature of the resin, the Examiner could not locate a reference that contemplated densifying a silicone resin filled with any of the materials corresponding to component (2) of the instant invention under these conditions. It is these shortcomings in the art that make claims 11-15 patentable pending the resolution of the 112 issues.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 703-605-1176. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

September 5, 2003

A handwritten signature in black ink that reads "Robert A. Dawson". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Robert Dawson  
Supervisory Patent Examiner  
Technology Center 1700